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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,613	12/02/2003	Jerome Boutet	117911	2727

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EXAMINER	
AMARI, ALESSANDRO V	
ART UNIT	**PAPER NUMBER**
2872	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/724,613	BOUTET ET AL.	
	Examiner	Art Unit	
	Alessandro V. Amari	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) *2,5 and 6* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4 and 7-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some* c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/2/03&4/22/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species 1 in the reply filed on 22 April 2005 is acknowledged. The traversal is on the ground(s) that the search and examination of the entire application can be made without serious burden.

This is not found persuasive because in order to traverse on the grounds that the species are not patentably distinct, the applicant should provide evidence showing the species to be obvious variants or clearly admit on the record that this is the case. No such evidence was provided in the traversal.

Furthermore, the applicant argues that the alternative embodiments of claims 5 and 6 can be included in species 1 since both embodiments use an optical screen transmitting light.

In response to this argument, the Examiner would like to point out that species 3 (claim 6) and species 4 (claim 5) in the restriction are clearly described as particular embodiments as shown in Figures 7 and 8 and are thus independent inventions.

Thus, claim 2, 5 and 6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Wilson et al. US 6,687,052.

In regard to claim 1, Wilson et al teaches (see Figure 1) an optical microscope for observation of several spots of an object placed in an object plane of the microscope, comprising a light source (1), an objective (4) and a light beam coming from the light source as shown in Figure 1, microscope comprising a modifiable optical transmission screen (6) as described in column 3, lines 63-67, comprising zones each presenting a first passing state and a second closed state as described in column 3, lines 26-35, placed on the path of the optical beam upstream from the object as shown in Figure 1 and able to generate in the object plane an image coinciding substantially with the spots of the object to be observed as described in column 3, lines 35-56.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Krause US 5,587,832.

In regard to claim 1, Krause teaches (see Figure 1) an optical microscope for observation of several spots of an object placed in an object plane of the microscope, comprising a light source (18), an objective (24) and a light beam coming from the light source as shown in Figure 1, microscope comprising a modifiable optical transmission

screen (14) as described in column 3, lines 63-67 and column 4, lines 1-3, comprising zones each presenting a first passing state and a second closed state as described in column 4, lines 38-59, placed on the path of the optical beam upstream from the object as shown in Figure 1 and able to generate in the object plane an image coinciding substantially with the spots of the object to be observed as described in column 3, lines 63-67 and column 4, lines 1-19.

Regarding claim 3, Krause teaches that the modifiable optical transmission screen comprises a matrix of liquid crystal elements, each of the liquid crystal elements presenting a first transparent state and a second opaque state as described in column 4, lines 46-49. Although the prior art does not specifically disclose the first transparent state and the second opaque state, this feature is seen to be an inherent teaching of that device since the liquid crystal elements must operate to either pass light or block light in order for the device to function as intended.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al US 6,687,052 in view of Krause US 5,587,832.

Regarding claims 3 and 4, Wilson et al teaches the invention as set forth above and regarding claim 4, Wilson et al teaches that the modifiable optical transmission

screen has a polarization state as described in column 3, lines 26-35 but regarding claim 3 does not teach that the modifiable optical transmission screen comprises a matrix of liquid crystal elements, each of the liquid crystal elements presenting a first transparent state and a second opaque state and regarding claim 4, does not teach that the matrix comprises liquid crystal elements.

Regarding claims 3 and 4, Krause teaches that the modifiable optical transmission screen comprises a matrix of liquid crystal elements, each of the liquid crystal elements presenting a first transparent state and a second opaque state as described in column 4, lines 46-49. Although the prior art does not specifically disclose the first transparent state and the second opaque state, this feature is seen to be an inherent teaching of that device since the liquid crystal elements must operate to either pass light or block light in order for the device to function as intended.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the liquid crystal elements of Krause in the microscope of Wilson et al in order to provide for higher transmittance and lower power consumption of the modifiable optical transmission screen.

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al US 6,687,052 in view of Richardson US 6,704,140.

Regarding claims 7 and 8, Wilson et al teaches the invention as set forth above but in regard to claim 7 does not teach that the light source is formed by an array of light emitting diodes and further regarding claim 8 does not teach that the array of light emitting diodes comprises light emitting diodes of different colors.

Regarding claim 7, Richardson teaches that the light source is formed by an array of light emitting diodes as described in column 14, lines 36-42 and further regarding claim 8 teaches that the array of light emitting diodes comprises light emitting diodes of different colors as described in column 14, lines 36-42.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize an array of light emitting diodes of different colors as taught by Richardson in the microscope of Wilson et al in order to vary the relative brightness from each of the light emitting diodes and in order to provide a color matched lighting system so that the color, position and style of illumination can be varied to meet the needs of an microscope application (e.g., fluorescence).

8. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krause US 5,587,832 in view of Richardson US 6,704,140.

Regarding claims 7 and 8, Krause teaches the invention as set forth above but in regard to claim 7 does not teach that the light source is formed by an array of light emitting diodes and further regarding claim 8 does not teach that the array of light emitting diodes comprises light emitting diodes of different colors.

Regarding claim 7, Richardson teaches that the light source is formed by an array of light emitting diodes as described in column 14, lines 36-42 and further regarding claim 8 teaches that the array of light emitting diodes comprises light emitting diodes of different colors as described in column 14, lines 36-42.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize an array of light emitting diodes of different colors as

taught by Richardson in the microscope of Krause in order to vary the relative brightness from each of the light emitting diodes and in order to provide a color matched lighting system so that the color, position and style of illumination can be varied to meet the needs of an microscope application (e.g., fluorescence).

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al US 6,687,052 in view of Richardson US 6,704,140 and further in view of Weiss et al US 6,369,939.

Regarding claim 9, Wilson et al in view of Richardson teaches the invention as set forth above but does not teach lighting of the object by emission of a series of light impulses at preset intervals.

Regarding claim 9, Weiss et al teaches lighting of the object by emission of a series of light impulses at preset intervals as described in column 3, lines 16-18.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the pulsed lighting as taught by Weiss et al in the microscope of Wilson et al in view of Richardson in order to provide more control of lighting conditions for particular microscope applications (e.g., fluorescence) and to reduce power consumption.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krause US 5,587,832 in view of Richardson US 6,704,140 and further in view of Weiss et al US 6,369,939.

Regarding claim 9, Krause in view of Richardson teaches the invention as set forth above but does not teach lighting of the object by emission of a series of light impulses at preset intervals.

Regarding claim 9, Weiss et al teaches lighting of the object by emission of a series of light impulses at preset intervals as described in column 3, lines 16-18.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the pulsed lighting as taught by Weiss et al in the microscope of Krause in view of Richardson in order to provide more control of lighting conditions for particular microscope applications (e.g., fluorescence) and to reduce power consumption.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (571) 272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ava
29 April 2005

Alessandro Amari
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